# Chelmsford Amateur Radio Society

Club Station Call Sign GOMWT



Issue Number 321

October 1992

### The ANNUAL GENERAL MEETING

Tuesday 6th October at 7.30pm will be the date and time for the Chelmsford Amateur Radio Society to take stock of their existence.

We are very fortunate to have 79 members supported by an enterprising committee who arrange monthly meetings in very comfortable surroundings, all achieved on a very modest budget.

To maintain the interest for amateur radio in general and our club activities in particular, we need small increments of support from all the members rather than large amounts of effort from just a few. The A.G.M. is just one example where this collective effort can make all the difference to future planning by the simple act of voting for or against the various proposals that will be made from the floor of the meeting.

As your President, I feel both proud and honoured to be informed that all the members of the present committee are willing to serve another term in office. This alone will make the formal task of electing the new committee very straightforward and leave more time for the proposal of ideas towards next years calender of meetings and events (for which I must say that we already have a sound foundation).

To add interest to the evening we will have the bumper draw for the free annual subscription fee as well as the usual monthly fund raising draw with interesting prizes.

To add even more interest we propose to round off the evening with a technical forum where we will attempt to answer some of the more difficult questions encountered by members in their dealings with amateur radio. We are fortunate in that amongst our ranks we have some very good heads for solving problems.

Let us hope that as many members as possible will be able to come to the Marconi College, Arbour Lane, Chelmsford, for this interesting evening.

### DATES FOR YOUR DIARY

6 Oct. C.A.R.S. ANNUAL GENERAL MEETING.

18 Oct. DF EVENT - Mid Essex Trophy - Bury St. Edmonds.

23/24 Oct. LEICESTER A.R.S. SHOW - Granby Halls.

3 Nov. MEETING - Annual Junk Sale.

1 Dec. MEETING - Shack Test Equipment - Fred, G2HNF.

12 Dec. C.A.R.S. CHRISTMAS SOCIAL - Hatfield Peverel.

# IMMEDIATE ATTENTION - Only because of the date! WRITTLE ART GROUP - Coach Outing - LONDON.

Visit To The Royal Academy.

On Saturday, 3rd October 1992 there will be a trip to see the Alfred Sisley (1839-1899) Exhibition. This is the first major retrospective exhibition of this popular French Impressionist.

The Coach will leave Writtle Village Green Car Park at 9.30 a.m. and drop at Piccidilly, outside The Royal Academy. We will return from London at 5.00pm, back in Writtle approx 6.30pm.

Cost of return Coach Trip will be £4.00, children £2.00.

Entrance to the exhibition (optional addition) is normally £5.00 but as a Party it will only be £3.40.

You can come just for the coach trip (what a bargain! ed.) Please ring John or Pauline Bowen on (0245) 224677.

#### NI-CAD BATTERY CHARGER - Roy, G3PMX

I am pleased to report that the take-up response for the data sheet and Darlington Transistors at the September meeting was very encouraging, we look forward to viewing some models of the recommended charger circuit. In addition, the sale of transistors raised £12.30 for the Equipment fund. Please note that we still have some Darlingtons in stock.

#### **COMMITTEE MEETING**

The October Committee meeting will be held in the Telford Lodge at 7.30pm on Wednesday 14th October, you are most welcome to join us.

#### ANNUAL AWARD OF MERIT

Two nominations have been received for consideration towards this years presentation of the award at the October Meeting.

The first is for Fred, G2HNF, nominated by Don, G0LLA with the citation "Over the past 2½ years he has generously devoted an evening a week instructing me in theory and practice of radio construction, test equipment, aerials and operating technique. From my observations on club night, he always appears to be answering questions and assisting members with regard to radio. He has in the past helped with aerial problems at home QTH of members".

The second is for Gwyn, G4FKH, nominated by John, G8DET with the citation "I would like to propose G4FKH, Gwyn for his unstinting work for the club as a whole and in particular; [1] his efforts for Field Day as an organiser, teacher and operator; [2] his assistance to members regarding Morse and anything else he knows about; [3] his assistance to G8DET making and erecting the aerial for Garden Party(s), special event stations, e.g. Hylands Park and the St. Johns Ambulance; [4] projecting the club principles with all that he does with Amateur Radio, e.g. RSGB, etc, all in all, a first class chap and a pleasure to have in the Club"

Voting slips for these and any other nominations received will be handed out at the beginning of the meeting.

#### **NEW RLO FOR ESSEX.**

Malcolm Salmon, G3XVV is the new R.S.G.B. Liaison Officer for Essex. If you need to contact Malcolm his address is 54, Church Road, Rivenhall, Witham, CM8 3PH. Tel: (0376) 514377.

#### SILENT KEY

It is with sadness that we announce the passing of Frank Bohannan in his 96th year on 23rd September.

Frank joined our Club two years ago and will be remembered for his enthusiasm for radio in spite of his great age.

A message of sympathy has been sent on behalf of the Society to his family.

#### LAST MONTHS MEETING - Dick G3WHR

Last month we were pleased to welcome back Pat Gowan, G3IOR for a second visit, this time he was in good voice.

In his introduction John Bowen mentioned Pat's role as Head of the North Sea Action Group, and asked for an update on the pollution levels around our coast. It was revealing and disappointing to learn that many East coast beaches still fail the EC standards for Bathing beaches. In a recent survey of Norfolk and Suffolk only Walberswick and nearby Southwold passed the EC Blue Flag test.

Then on to the main topic of the evening - Moonbounce. Pat began by telling us about the moon's orbit and listed the various losses incurred in bouncing a signal back to earth. The lowest path losses occur on 2m, but they still amount to a minimum of 251dB.

Pat gave us a brief history of EME techniques which showed how amateurs have been able to improve all aspects of their stations. First was a special 1kW licence for EME which allowed increased transmitter power. On the receive side, a Low Noise Amplifier is essential - early designs using nuvistors have now been superseded by GasFets. The design of suitable aerials has also been advanced through the use of computer aided design. It is not sufficient to have high forward gain - the side and back lobes must be small to reduce earth noise.

With the power levels available to UK amateurs an EME QSO may only be possible when conditions are most favourable. This has led to various methods of path utilisation. Pat showed a video which demonstrated a computer program written by John Branegan GM4IHJ to calculate the path loss for a given date and time. This produced a very detailed output which included Doppler shifts of up to 700Hz on 70cm signals caused by the relative motion of the earth and moon.

A second video allowed us to see the EME station of G3HUL. This featured many homebrew items, including the 700W 70cm transmitter and associated 4 over 4 Yagi array that together produce an EIRP of 188kW. Doug demonstrated that his station could receive its own return signal - delayed 3 seconds by the 500,000 mile round trip, and we also heard part of an EME QSO.

After tea Pat explained how a 2m QSO via Moonbounce was possible with more modest equipment - 100W, 10ele, Mutek LNA. Though unable to receive your own return signal, a QSO with one of the Big Boys in EME could be arranged via the EME net on 14.345MHz.

Pat also brought us the latest information on the satellite scene, including details of a digital FM transponder fitted to RS14 and an automatic CW station aboard Oscar12.

In answering our questions, Pat's knowledge and enthusiasm for EME and satellite operation was clearly evident, and he certainly imparted some of that knowledge to us in an enjoyable way. We will look forward to another visit.

#### **AMTOR - Geoff, G3EDM**

When I gave my lecture last April, a number of members requested further information, preferably in document form. I have now completed this task and Roy, G3PMX has reproduced the 21 pages of text and diagrams on his copier. At the October meeting I will have 10 documents to match the list of names I collected earlier.

The reproduction cost is £1.40 per document. If further interest is shown, Roy says he can make some more at the same price.

#### **HEAVENS ABOVE - Ela, G6HKM**

Early September the postman delivered an envelope to 'Ela (the) Martyr', guess what, it was a QSL from GOD, (G7GOD/P), confirming our QSO a few days previously, I wonder why he had left his normal residence! When called on 2M, my first thought was somebody is playing a joke; to my knowledge that suffix has not been issued in the past, a quick look at the Call Book confirmed that G7GOD is genuine and his name is Riley. Further examination reveals other call signs with words which would never have been issued in the 'good old days', thats computerisation for you! I don't think I will risk changing my call sign in fear of what I might get!

## DF NEWS - Dick G3WHR The RSGB Mid-Thames event.

The start for the final qualifying event was at the Devil's Punchbowl, near Wantage. Despite a hilltop position one signal was very weak and most competitors required an approximate bearing.

Setting out for the station we could hear soon brought us to the top of the Downs near the appropriately named Ham Hill. Unfortunately for us the station was near the bottom - 500ft below, OK going down but what a climb on our return journey.

We heard the other station at 4pm from near Newbury. Two good bearings indicated Ashamstead Common, where we arrived just at the end of a transmission. Seeing another team nearby we followed them into the wood, believing that they knew which way to go - a mistake.

The 4.15 continuous transmission allowed us to correct our/their error and we arrived at the transmitter to find Andrew and Philip all smiles, clearly they had been-in long before.

At the tea Andrew collected the Wine, the Mid-Thames trophy, and an invitation to the Final - Chelmsford had done it again.

Results:-

1 Andrew Mead 1554

3 Andy Collett 1621

7 Paul Clark 1622.5 a bit of a close finish!

With no Chelmsford event this year - Chelmsford teams have had to qualify away from home. This has required a lot of travel, in some cases combining DF with a weekend break, however, we now have five finalists from this area, Andrew Mead, Andy Collett, Mike Hawkins, Philip Cunningham and Me.

#### **Future Events**

18th October Mid Essex Trophy. This will follow the same pattern as last year using the Bury St. Edmunds map - with tea on a Bring a Bite basis. For details of the start please contact me.

#### MORE DF NEWS - Dick, G3WHR

The fourth Chelmsford event took place in August with Roy Emeny operating the hidden station. The holiday season reduced the number of teams so points were guaranteed to all who finished.

Roy was a good signal at Tiptree, with the bearing going towards Brightlingsea. I decided to go North to the A12 to obtain a cross bearing but to my surprise I couldn't hear any transmissions at 7.45 or 8.00 - could he be near the start. Returning via the Zoo I heard Roy again but obtained a near parallel bearing. Off to the North yet again for a third bearing by Berechurch which finally gave me a cross near Brightlingsea. However when I arrived at the University of Essex the bearing was back towards Rowhedge - and the level crossing gates were shut on the way back. It was now 9.00 and I was nowhere near the TX, time to head for the PUB.

On my arrival I met Andrew and Daphne, they had been almost up to Roy but had encountered a local resident who insisted that they could go no further as there was no right of way. Eventually Roy and the others turned up, they confirmed that the resident was wrong and that Roy had permission from the landowner to site his station near the footpath - he had even parked his car with the residents neighbour.

Philip and Peter had approached Roy from the other end of the footpath, but even then they had great difficulty in finding the Tx.

Results:-

1 Philip Cunningham 9.??

2 Peter Graves 9.???

Two teams failed to find the transmitter.

73 from Roy & Ela Martyr, G3PMX & G6HKM

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